

REMARKS

By the present amendment, claims 43-58 are pending in the application. Claims 43 and 44 are the independent claims.

Claims 1-3, 12-14 and 16-42 were previously canceled without prejudice to the filing of divisional application(s) directed to non-elected inventions.

Amendments To Claims

Independent claims 43 and 44 have been amended in response to the Office Action mailed August 26, 2003.

The Office Action objected to the claims of the Amendment filed June 27, 2003 (Certificate of Mailing dated June 25, 2003) because the new claims of this Amendment, i.e., claims 43 to 58, contained a limitation that the coating on the stainless steel sheet is removable from the stainless steel sheet. The Office Action took the position that this limitation caused the claims of the Amendment to be patentably distinct from the originally filed claims and had they been included with the originally filed claims, a restriction requirement would have been made between the claims of the Amendment and the originally filed claims. The applicant was advised that the applicant could overcome this problem by removing the limitation that the coating is removed from the steel substrate.

By the present amendment, independent claims 43 and 44 have been amended to delete the last paragraph of

independent claims 43 and 44 which is directed to "wherein the soluble lubricating film is removed from the stainless steel sheet after the soluble lubricating surface-treated stainless steel sheet is shaped".

It is believed that the amendments to independent claims 43 and 44 by the present amendment is fully responsive to the Office Action mailed August 26, 2003.

Claims 43 and 44 of the Amendment filed June 27, 2003 (Certificate of Mailing dated June 25, 2003) have been amended by the present amendment without prejudice to the filing of a continuation/divisional application directed to the subject matter of claims 43 and 44 of the Amendment filed June 27, 2003 (Certificate of Mailing dated June 25, 2003).

Restriction Requirement

In response to the Restriction Requirement, applicants again affirm the election, with traverse, of the claims of Group I, i.e., claims 1-3, 12-14, and 22-39 and the ferrite-type stainless steel species.

Since claims 32-33 and 37-39 are directed to stainless steel species other than ferrite-type stainless steel, the applicants have effectively elected claims 1-3, 12-14, and 22-36 for further prosecution in this application.

This election is made with traverse because, although applicants maintain that all the claims are patentably distinct from one another, applicants believe

that the claims are sufficiently related to be properly presented in a single application.

This election is made without prejudice to the filing of a divisional application(s) directed to the non elected invention.

Possible Rejoinder

The applicants request the Examiner to consider possible rejoinder of the austenite-type stainless steel species and the two-phase-type stainless steel species to the elected claims of Group I if the elected claims are deemed patentable regardless of the stainless steel used, i.e., if a generic type stainless steel would be deemed patentable.

Support For Claims

Claims 43-58 of the present amendment correspond to elected claims 2-3, 12-14 and 22-36, i.e., the claims of Group I restricted to the ferrite-type stainless steel species.

Claims 43 & 44

Independent claims 43 and 44 correspond to original independent claims 2 and 3. The phrase "mainly comprising" has been changed to --consisting essentially of--. The resin composition has been limited to --(A) a resin composition consisting of only a soluble polyurethane resin composition ...--.

Independent claims 43 and 44 have been restricted to the --ferrite-type stainless steel sheet--.

Claims 45 & 46

Dependent claims 45 and 46 correspond to prior dependent claims 22 and 23. The last two lines of these claims have been rewritten to read --has an acid value of 30 to 180-- in order to improve clarity.

Claims 47 & 48

Dependent claims 47 and 48 correspond to prior dependent claims 24 and 25. In claims 47 and 48, the term "the neutralizer" has been changed to --a neutralizer--.

Claims 49 & 50

Dependent claims 49 and 50 correspond to prior dependent claims 26 and 27. The term "the main component" has been changed to --a component--.

Claims 51 & 52

Dependent claims 51 and 52 correspond to prior dependent claims 28 and 29. The term "the main component" has been changed to --a component--.

Claims 53 & 54

Dependent claims 53 and 54 correspond to prior dependent claims 30 and 31.

Claims 55 & 56

Dependent claims 55 and 56 correspond to prior dependent claims 35 and 36.

Claims 57 & 58

Dependent claims 57 and 58 correspond to original dependent claim 13.

New matter is not being presented by the present amendment.

§112, ¶2

In the Office Action mailed January 3, 2003, claims 13 and 24 to 29 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

By the present amendment, claims 13 and 24 to 29 have been canceled. This rejection, as applied to the claims of the present amendment, is respectfully traversed.

With regard to claim 13, claim 13 has been canceled and replaced with new claims 57 and 58 which depend from new claims 55 and 56.

With regard to claims 24 and 25, claims 24 and 25 have been canceled and replaced with new claims 47 and 48 wherein the term "the neutralizer" has been changed to "a neutralizer".

With regard to claims 26 to 29, claims 26 to 29 have been canceled and replaced with new claims 49 to 52 wherein the term "main component" has been changed to --a component--.

In view of the present amendment, it is respectfully requested that the rejection under 35 U.S.C. §112, second paragraph, be withdrawn.

Claim Interpretation

With regard to claims 2 and 3, claims 2 and 3 have been canceled and replaced with new independent claims 43 and 44. In new independent claims 43 and 44 the phrase "mainly comprising" has been changed to --consisting essentially of--.

With regard to claims 22 and 23, claims 22 and 23 have been canceled and replaced with new claims 45 and 46. New claims 45 and 46 use the phrase --has an acid value from 30 to 180--.

§103

In the Office Action mailed January 3, 2003, claims 1-3, 13, 22-23, 26-31 and 34-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Katsushi et al. in view of Hirata et al.

Claims 1-3, 22-23, 26-31 and 34-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Katsushi et al. in view of Bohnke et al.

Claims 1-3, 13, 22-31 and 34-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ryoji et al. in view of Hirata et al.

Claims 1-3, 22-31 and 34-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ryoji et al. in view of Bohnke et al.

These rejections, as applied to new claims 43-58, are respectfully traversed.

Patentability

As described in the specification, the resin of the soluble lubricating resin film of the present invention consists essentially of the soluble polyurethane resin composition (A), which is suitable to form a soluble lubricating resin film. By using the soluble lubricating resin film of the present invention, excellent lubrication and protection during even deep drawing or squeezing can be obtained. The soluble lubricating resin film of the present invention is provided so as to be easily removable from the stainless steel sheet after shaping of the stainless steel sheet.

Each of independent claims 43 and 44 contain the limitation "comprising a substance have on both surfaces or one surface thereof a soluble lubricating resin film consisting essentially of (A) a resin composition consisting of only ...".

A soluble lubricating resin film is a positive limitation set forth in both independent claim 43 and independent claim 44. This limitation appears in original independent claim 2 and original independent claim 3.

A soluble lubricating resin film of the present invention is completely opposite to a chemical resistant and/or corrosion resistant film or coating of the prior art and/or a non-defilm (not removed film) of the prior art.

Katsushi et al.

Katsushi et al. clearly mentions that the film is a non-defilm (not-removed film) in the abstract and in paragraphs (0004) and (0005). The purpose of the film is to provide chemical and corrosion resistances to steel sheet being used. The film of Katsushi is opposite to the soluble lubricating resin film of the present invention.

Katsushi et al. discloses an insoluble lubricating resin film comprising a mixture of a urethane resin and an epoxy resin. The composition of the resin is different from that of the present invention which does not contain the epoxy resin.

Thus, Katsushi et al. is essentially different from the present invention and the present invention is not disclosed or suggested by Katsushi et al.

Ryoji et al.

Ryoji et al. does not directly mention that the film is a non-defilm (not-removed film), but it is clear that the film is a non-defilm (not-removed film) since Ryoji et al. describes that the purpose of the film is to provide chemical and corrosion resistances to steel sheet. The purpose of the film of the present invention is to provide an excellent lubrication during deep shaping, and chemical and corrosion resistances are not required by the present invention since the film is removed after the shaping.

The chemical and corrosion resistant film of Ryoji et al. is opposite the soluble lubricating resin film of the present invention.

The assignee of Katsushi et al. and Ryoji et al. as well as the present application is the same, Nippon Steel Corporation. Therefore the present inventors know that Katsushi et al. and Ryoji et al. are directed to a non-defilm (not-removed film).

The composition of the film in Ryoji et al. is very similar to that of Katsushi et al., and different from that of the present invention. Further, the inventors, Katsushi Saito and Toshiyuki Katsumi, are common in Katsushi et al. and Ryoji et al. The difference between Katsushi et al. and Ryoji et al. resides in presence or absence of the chemical conversion treatment of the surface of the steel sheet under the non-defilm.

The purpose and the constitution of the invention of Ryoji et al. are thus different from those of the present invention.

Ryoji et al. is essentially different from the present invention and the present invention is not disclosed or suggested by Ryoji et al.

Neither Katsushi et al. nor Ryoji et al. disclose or suggest "a soluble lubricating resin film consisting essentially of (A) a resin composition consisting of only a soluble polyurethane resin composition containing a carboxyl group or a sulfonic acid group within the molecule and

having a glass transition point of 100°C or more as a dry film ..." as required by the present invention.

Hirata et al. and Bohnke et al.

Hirata et al. and Bohnke et al. do not disclose the lubrication treatment of the present invention.

Therefore, even if Katsushi et al. and Ryoji et al. are combined with Hirata et al. and Bohnke et al., the present invention is not disclosed or suggested by the combination.

It is submitted that the present invention, as defined in independent claims 43 and 44, and all claims dependent thereon, is not disclosed or suggested by Katsushi et al., Ryoji et al., Hirata et al., and/or Bohnke et al. standing alone or in any combination.

It is therefore submitted that claims 43-58 of the present amendment are patentable.

CONCLUSION

In view of the present amendment and the foregoing remarks, it is submitted that the application is now in condition for allowance. It is therefore respectfully requested that the application, as amended, be allowed and passed for issue.

Respectfully submitted,

KENYON & KENYON

By: John J. Kelly, Jr.
John J. Kelly, Jr.
Reg. No. 29,182

KENYON & KENYON
One Broadway
New York, New York 10004
(212) 425-7200